

EXHIBIT C

EXHIBIT 11



EXHIBIT C/1

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EXPERT REPORT

I, Alexander R. Marmureanu, M.D. declare as follows:

I currently practice Thoracic and Cardiovascular Surgery in Los Angeles, CA. I am Board Certified in Cardiothoracic Surgery and General Surgery and licensed to practice in the states of California and New York. I am also an Assistant Professor of Surgery and Vice Chair of the Bylaws Committee at the School of Medicine at California University of Science and Medicine.

I am the CEO and President of California Heart and Lung Surgery Medical Center in Los Angeles and the Director of Cardiothoracic Surgery at Centinela Hospital Medical Center as well as the Director of Cardiovascular Surgery at Southern California Hospital at Culver City.

I am also the Medical Staff President-Elect and the Chairman of the Multi-Disciplinary Peer Review Committee, as well as member of the Medical Executive Committee Leadership at Hollywood Presbyterian Medical Center.

My offices are located in Westwood, at 10921 Wilshire Blvd., #1205 Los Angeles, CA 90024, and at Centinela Hospital Medical Center on 501 East Hardy St. #315, Inglewood CA 90301.

I completed my General Surgery residency at New York University Medical Center and Mt. Sinai Medical Center from 1994 – 2000. I then completed my Cardiothoracic Surgery fellowship at UCLA Medical Center from 2000 – 2002, where I served on the Faculty, before founding California Heart and Lung Surgery Center.

Currently, in addition to my Thoracic and Cardiovascular surgical practice, I continue to train medical students, residents, as well as other surgeons. I also continue to publish and lecture on various topics in the field of Thoracic and Cardiovascular Surgery.

Through my education, training and professional experience, I am very familiar with this patient's medical conditions, treatment, and associated prognosis.

My opinions are based upon my medical education, thoracic and cardiovascular surgical training, practice, and experience, as well as the medical records, and all other documents that I have reviewed.

I reserve the right to supplement my opinion based upon the receipt of additional information.

My education and background are accurately listed on the curriculum vitae, attached as Exhibit "A", which sets forth my education, training, experience, and qualifications as a physician and expert.

DOCUMENTS REVIEWED

Review of Legal Documents:

- Dr. Levy Deposition & Exhibits
- Medical Suitability for Expatriate Assignment History & Physical Examination
- Physical Requirements and Working Conditions
- Expatriate Exam Recommendations
- Complaint for Damages
- Assignment Offer
- Job Description
- Employee Mental Health Questionnaire
- Request for Medical Service
- Email Communications
- Kim, Joon Bum, et al. "Risk of rupture or dissection in descending thoracic aortic aneurysm." *Circulation* 132.17 (2015): 1620-1629.

Review of Medical Records

- Kaiser Permanente Medical Records & Imaging Studies
 - CT Angiogram Report
 - ECHO Report
 - Chest CT
 - Chest X-ray
- Holter Monitor Results
- Work Letter by Dr. Khan
- Immunization Records
- Quest Lab Results
- Access Medical Group (Chevron) Medical Examination

SUMMARY OF RECORDS

Mr. Mark J. Snookal, a 52-year-old male (DOB: [REDACTED] 1972), has a stable 4.2 cm dilated aortic root and ascending aortic aneurysm, both of which have remained asymptomatic. His ejection fraction is normal, indicating that the aneurysm has not impacted his cardiac function.

Mr. Snookal was being considered for a promotion to Reliability Engineering Manager at Chevron, a desk-based role that would have required travel to Escravos, Nigeria every other month. However, the offer was withdrawn following a routine medical evaluation due to concerns about his cardiovascular condition.

His cardiologist, Dr. Khan, had cleared him from a cardiovascular standpoint, confirming that the aneurysm was stable, well-managed, and posed minimal risk to his health. Dr. Khan recommended continued medical management and annual imaging. Despite this expert opinion, Chevron's medical team overruled Dr. Khan's recommendation, deeming Mr. Snookal's condition a "direct threat" to his safety based on perceived risks rather than clinical evidence.

Timeline of Events

2019 - Application for Nigeria Position

- Chevron required a medical evaluation before starting the assignment in Escravos, Nigeria. Dr. Irving Sobel assessed Mr. Snookal and deemed him fit for duty with two restrictions:
 - Avoid lifting weights over 50 lbs.
 - Obtain clearance from his cardiologist.

April 19, 2019 - Cardiology Note by Dr. Khan

- **Chronic Conditions:**
 - **Dilated Aortic Root: Stable and unchanged.**
 - **Aortic Valve Regurgitation: Stable and unchanged.**
 - Cholelithiasis
 - Hypertriglyceridemia
- **Key Points:**
 - **Mr. Snookal remained asymptomatic from a cardiac standpoint**, without shortness of breath during his daily activities.
 - He exercises regularly, performing 30 minutes of cardio on a treadmill about 4 times per week.
 - **His blood pressure at home was generally under 120 mmHg.**
 - **No history of syncope.**

Review of Imaging Studies

February 11, 2012 - Chest CT with Contrast

- Findings included diffuse mixed ground-glass and dense airspace consolidation, likely due to an infectious or inflammatory cause, unrelated to chronic heart conditions.
- Small bilateral pleural effusions and reactive subcarinal lymph nodes were noted, with no chronic or progressive pulmonary condition.

November 5, 2014 - Chest X-ray

- Imaging showed resolution of previous lower lobe opacities, suggesting the findings were not persistent or significant.
- A **normal cardiac silhouette** and absence of lung consolidation indicated no active cardiopulmonary pathology.

February 16, 2015 - Holter Monitor

- **Sinus rhythm** predominated, with occasional PACs and frequent PVCs (20% of beats), which are common and benign in the general population.
- Ventricular tachycardia was limited to brief, three-beat runs, suggesting no significant impact on physical ability or daily activities.

March 26, 2015 - Echocardiogram

- Showed normal biventricular size and function, with an **ejection fraction of 55-60%**, adequate for normal cardiac performance.
- Mild to moderate eccentric aortic regurgitation was present, but **Mr. Snookal was asymptomatic, indicating no functional limitation.**
- **The aortic root measurements were stable**, with no concerning elevation in right ventricular pressure.

May 26, 2016 - CTA Cardiac

- **The aortic root remained stable at 4.2 cm, with no significant progression.**

**Comment: No evidence suggested any pathology that would interfere with physical tasks.*

February 24, 2017 - Echocardiogram

- Findings included normal **systolic function/ejection fraction of 50-55%, stable aortic dimensions, and no significant strain on the heart.**

March 29, 2018 - 2D Echocardiogram

- Mild left ventricular enlargement and trace mitral regurgitation were noted, but the **ejection fraction was robust (60-65%)**
*(*Comment: the ejection fraction is the best indicator regarding how strong Mr. Snookal's heart is. He has normal ejection fraction)*
- Stable aortic regurgitation and mild right atrial enlargement were present.

April 10, 2019 - CTA Chest

- **Stable aortic root (4.2 cm) and ascending aorta measurements, with no significant enlargement or dissection.**

Review of Clinical Notes

March 13, 2017 - Cardiology Consultation

- **Mr. Snookal was asymptomatic from a cardiac perspective, with no limitations on physical exertion.**
- **His cardiac evaluations were precautionary, with no functional deficits identified.**

April 19, 2019 - Office Visit

- **Mr. Snookal continued to be asymptomatic, engaging in routine physical activity without limitations.**

June 5, 2019 - Holter Monitor Follow-Up

- The Holter results were consistent with previous findings, indicating benign PVCs.
- **Dr. Khan recommended a beta blocker as a precautionary measure to help prevent the growth of the ascending aorta**, even though it isn't strictly necessary since the patient has no symptoms.

In summary, the clinical data consistently indicates that Mr. Snookal's ascending aortic aneurysm and aortic root have remained stable at 4.2 cm, with no significant progression over several years of monitoring. At this size, in my opinion, the annual risk of rupture or dissection is less than 1%, especially considering the stability of his condition and aortic measurements. Given that his work is desk-based and not physically demanding, there is no evidence to suggest that his condition would affect his job performance or pose an immediate risk.

The risk of aortic dissection and possible rupture typically increases when the aneurysm reaches measurements around 5.5 cm, meaning Mr. Snookal's aneurysm is not large enough to be considered clinically significant. Moreover, there is no indication that his condition would worsen or present a danger while he carries out his duties in Escravos, Nigeria (his aortic measurements have remained stable). Additionally, his ejection fraction has remained normal, indicating that the aneurysm has had no impact on his cardiac function. This, combined with the absence of any symptoms, further supports his fitness for duty.

In conclusion, the evidence overwhelmingly supports that Mr. Snookal's aneurysm does not pose any clinically significant risk, particularly given his travel to Nigeria every other month. It is important to emphasize that before considering the risk of aortic dissection or rupture, there must be clear documentation of rapid growth or an increase in size to around 5.5 cm. In contrast, Mr. Snookal's aortic root dilation and ascending aortic aneurysm have consistently remained stable, with no signs of growth to date. With proper blood pressure management and regular monitoring, there is no justification for classifying his condition as a "direct threat." His functional capacity remains fully intact, further reinforcing that the perceived risks are unfounded.

METHODOLOGY OF OPINIONS

All of my opinions and conclusions are stated within a reasonable degree of medical certainty. The following opinions are based on my education, training, practice, and experience as well as the applicable medical literature available. I applied the same generally accepted methodology utilized in the medical community for diagnosing and treating cardiovascular diseases. I also utilized the same methodology in rendering my opinions as I do in my daily medical/surgical practice as a board-certified thoracic and cardiovascular surgeon. I reserve the right to amend, supplement or modify those opinions as new evidence is developed, including new or additional medical records become available.

OPINIONS

After thoroughly reviewing the medical records, imaging studies, and current clinical guidelines, it is my expert opinion that Mr. Snookal is fit for duty in Escravos, Nigeria. His 4.2 cm ascending aortic aneurysm and dilated aortic root have remained stable over several years of monitoring, staying well below the threshold for significant risk, which is generally considered to be around 5.5 cm. The stability of the aneurysm, combined with Mr. Snookal's well-controlled blood pressure, indicates there is no medical reason to restrict him from performing his job duties. I agree with Dr. Khan's recommendation to continue annual CT scans to monitor the aneurysm's stability. No additional treatments are necessary at this time.

Low Risk of Complications

In my expert opinion and according to the clinical data, ascending aortic aneurysms between 4.0 and 4.9 cm carry a very low annual risk of rupture or dissection, estimated at roughly 1% per year in this size range. This risk is considered negligible compared to the general population, especially given the absence of rapid growth in Mr. Snookal's case. Aneurysms typically become clinically significant and warrant surgical intervention when they become around 5.5 cm, OR if there is a rapid increase in size (more than 0.5 cm within six months). These conditions are not relevant in Mr. Snookal's case, as his aneurysm has demonstrated long-term stability, making the likelihood of rapid expansion exceedingly low.

Supporting Medical Evaluations

Dr. Khan's assessment, along with the corroborating medical evaluations, clearly indicates that Mr. Snookal's aneurysm poses a minimal to no risk. The lack of significant change in the aneurysm's size over the last several years, coupled with effective blood pressure management, places his risk profile near that of individuals without an aneurysm. As such, there is no medical justification for preventing him from undertaking his duties in Nigeria.

Job Requirements and Fitness for Duty

The physical requirements and working conditions for the assignment in Nigeria do not specify that an ascending aorta of 4.2 cm would preclude employment. Mr. Snookal's desk job is not physically demanding and does not present any additional risk factors that would exacerbate his condition. The concern cited by Chevron's medical team about the remote location and limited medical facilities in Nigeria (where he would be located every other month) does not outweigh the fact that routine monitoring (annually) is sufficient to ensure Mr. Snookal's safety.

Clinical Management and Recommendations

Annual imaging with CT scans or echocardiograms is sufficient to continue monitoring Mr. Snookal's aorta for any changes. This approach is consistent with standard practice for stable aortic aneurysms and aortic root dilations of this size. In addition, maintaining blood pressure control through medication and lifestyle modifications—keeping levels ideally below 130/80 mm Hg—will further minimize any potential risks associated with the aneurysm.

Additional recommendations include:

- Regular, moderate physical activity to support overall cardiovascular health.
- Adherence to a heart-healthy diet rich in fruits, vegetables, and whole grains.
- Awareness of symptoms indicating aneurysm expansion or rupture, such as sudden chest or back pain, with an understanding of the importance of seeking immediate medical care if such symptoms arise.

Conclusion

In conclusion, it is my expert opinion that Mr. Snookal's 4.2 cm ascending aortic aneurysm and 4.2 cm dilated aortic root are not clinically significant to warrant exclusion from his assignment in Nigeria, especially given the well-documented stability. Blood pressure control as well as annual monitoring are appropriate and effective measures to ensure his continued health. Based on the evidence, Mr. Snookal could have safely proceeded with his work in Nigeria, provided that standard annual surveillance remains in place. There are no medical grounds to consider him unfit for duty or to classify his condition as a "direct threat" to his safety.



Alexander Marmureanu MD

October 9, 2024